

**Third Term Examination-2075**  
**Gandaki Boarding School**  
**(Regional School)**

**Subject: Computer Science**

**Full Marks: 50**

**Class: 10**

**Time: 1:30 hrs**

**Pass Marks: 20**

**(Group 'A') Computer Fundamental (22 marks)**

1. Answer the following questions: (5x2=10)
- What is Transmission Media? List any two differences between Star and Bus topology.
  - What is Intranet? List the services provided by the Internet.
  - What is multimedia technology? List any four application areas of multimedia.
  - Define software security. List out any four measures to protect computer software.
  - Define Antivirus. Write down any two examples of antivirus software.

2. a. Convert as instructed: (2x1=2)
- $(305)_8$  into decimal
  - $(CAB)_{16}$  into binary

- b. Perform binary operation. (2x1=2)
- $101 * 11 + 101$
  - Divide  $101101$  by  $101$

3. Match the following pairs: (4x0.5=2)

Group A	Group B
a. Microwave	Network Protocol
b. UPS	Unguided transmission media
c. AppleTalk	Power protection device
d. Cyber ethics	Android OS
	Code of conduct for computer users

4. Select the correct answer: (4x0.5=2)
- Which is not the network hardware component?  
 (i) Switch (ii) Repeater (iii) Router (iv) Windows NT
  - In which communication media does data travel in the form of light signal?  
 (i) Telephone wire (ii) Fiber optic (iii) Coaxial Cable (iv) Twisted pair cable

- Which is not the protocol?  
 (i) POP (ii) IPX/SPX (iii) NETBIOS (iv) Client/Server
- Which is the Not a virus program?  
 (i) I Love You (ii) Trojan (iii) Rocket (iv) Logic Bomb

5. Give appropriate technical terms of the following: (4x0.5=2)
- The process of buying and selling products and services online
  - The cabling structure of LAN.
  - Group of computers that can share resource.
  - One way communication mode.

6. Write full forms: (4x0.5=2)
- UPS
  - VOIP
  - WLAN
  - ATM

**(Group 'B') Database (10 marks)**

7. Answer the following questions. (3x2=6)
- What is a database and DBMS?
  - What is data type? List any four types of data used in Microsoft Access?
  - Define Query. List any two uses of form.

8. Select the correct answer: (4x0.5=2)
- In MS Access we enter data using .....  
 (i) Form (ii) Report (iii) Table (iv) Both (i) & (iii)
  - The extension of database file in Access is .....  
 (i) .dbf (ii) .accdb (iii) .accbd (iv) .dbm
  - ..... uniquely identifies any field.  
 (i) Indexing (ii) Memo Field (iii) Primary Key (iv) Query
  - The objects of Access that stores the data is known as .....  
 (i) Query (ii) Table (iii) Form (iv) Report

9. Match the following pairs: (4x0.5=2)

Group A	Group B
a. MySql	iOS
b. Indexing data	To store picture and video
c. OLE Object	RDBMS
d. Caption	Searching fast
	2048 characters

**(Group 'C') programming (18 marks)**

10. a. What is a local and global variable? (1)  
b. Write any one difference between function and sub procedure. (1)  
c. Write down the function of the following statements: (1)

(i) RMDIR (ii) EOF()

11. Write the output of the given program: (2)

```
DECLARE SUB Series ( )  
CALL Series  
END  
  
SUB Series ( )  
N=2  
C=1  
WHILE C<=10  
    PRINT N  
    N=N+C  
    C=C+1  
WEND  
END SUB
```

12. Re-write the given program after correcting the bugs: (2)

```
REM To display all the records from emp.dat file  
OPEN "emp.dat" FOR APPEND AS#1  
WHILE NOT EOF()  
INPUT"Enter name ";N$  
INPUT"Enter Address";A$  
INPUT 1,N$,A$  
PRINT N$,A$  
LOOP  
CLOSE #1  
END
```

13. Study the following program and answer the given questions: (2x1=2)

```
DECLARE FUNCTION Result(X,Y)  
CLS  
A=10  
B=15  
Z=Result(A,B)
```

```
PRINT Z  
END
```

```
FUNCTION Result(X,Y)  
    R1=Y MOD X  
    R2=X MOD Y  
    Result=R1+R2  
END FUNCTION
```

- (a) How many arguments and parameters are used in the above program?  
(b) What is the output of the above program?

14. a. Write a program to calculate and display area of a triangle using FUNCTION..END FUNCTION. (Hints: Area =1/2\*base\*height) (3)

- b. Write a program to check whether the given word is 'palindrome or not' using SUB....END SUB. (3)

- c. Write a program to create a sequential data file "marks.dat" to store Name and Mark obtained in Computer, Math and Science subjects for some student. (3)